

REMARKS

Claims 1-6 and 13-20 are pending in the application. Claims 1 and 13 are independent claims. No claim amendments have been made herein.

Claims 1-6 and 13-20 stand rejected in the referenced office action. Reconsideration of the application is respectfully requested in view of the remarks below. The Examiner's rejections are addressed in substantially the same order as in the referenced office action.

REJECTION UNDER 35 USC § 112

Claims 1 and 13 stand rejected under 35 USC § 112 ¶ 2 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

Applicant respectfully disagrees with the Examiner's assertion that "the word 'full' is a relative word, which renders the claim indefinite." Attention of the Examiner is drawn to the following definition of "full" from the Merriam Webster Online Dictionary:

2 a : complete especially in detail, number, or duration <a *full* report> <gone a *full* hour>
c : having all distinguishing characteristics : enjoying all authorized rights and privileges <*full* member>

d : not lacking in any essential :

All of these definitions make clear that the term “full” is not a relative word, but an absolute word. The term “full” as used in the claims qualifies the word “seismic data file” and the Examiner is not free to treat the word “full” as meaning “a linked file, which includes additional map information stored at a different scale and thereby provides a greater/fuller detail.”

This is consistent with the use of the term in the application, where the term “full” is used in contrast to the term “compressed.” See, for example, paragraphs [0009], [0010], [0012], [0015], [0019], [0023], [0026], [0030], [0031], [0032], [0039], [0040]. Attention is particularly drawn to the statement in paragraph [0009] that “Each of the compressed seismic data files has less information content than its corresponding full seismic data file”. It is further noted in paragraph [0015] that the compressed data may be an image file, while in paragraph [0019] it is noted that the full data file may contain raw seismic data and is typically available on magnetic tape. It is further noted in paragraph [0023] that the compressed data file contains less information than the corresponding full data file.

Accordingly, applicant respectfully submits that claims 1 and 13 are patentable under 35 USC §112 ¶6.

REJECTION UNDER 35 USC § 103

Claims 1, 4-6, 13-17 and 20 stand rejected under 35 USC § 103(a) as being unpatentable over *Conoco* (O&G Journal) in view of *Nomura* (US 6023655) and further in view of Official Notice. Claims 1 and 13 are independent claims.

One embodiment of the present invention is directed to an article of manufacture having a plurality of computer readable files relating to geophysical seismic data recorded thereon. The article comprises a medium having the computer readable files recorded thereon. The files include data for a map display for a geographical area. The map display has multiple levels of geographic detail and includes a plurality of surface seismic data lines. The files further include data for a plurality of compressed seismic data files corresponding respectively to the surface seismic data lines. Each of the compressed seismic data files is used to produce a corresponding geophysical display when its corresponding surface seismic data line is selected. The files also include a plurality of references to a plurality of full seismic data files. The references correspond respectively to the plurality of compressed seismic data files. Each of the compressed seismic data files has less information content than its corresponding full seismic data file.

Applicant fails to appreciate the relevance of the *Conoco* reference to the claimed invention. The main emphasis in *Conoco* is to map geology and geography through time. The former is defined in the Merriam Webster Online Dictionary as:

a science that deals with the history of the earth and its life especially as recorded in rock;

while the latter is defined as:

a science that deals with the description, distribution, and interaction of the diverse physical, biological, and cultural features of the earth's surface

What is disclosed in *Conoco* is a computer program aimed at producing time slices (14 to be precise) of how land masses were situated at each of those 14 times ranging from 600 million years ago to 14 million years ago. This is due to the fact that the land masses we know today have not been in the same relative position to each other over geologic time, and knowledge of where a specific area was at different times in geologic history provides clues that point to the potential present location of oil and gas accumulations.

The word "seismic" appears only twice in the entire document. The first (on page 1, column 4) refers to how the project started ("the scientists started with a particular time-slice and studied such items as well logs, published maps, and regional seismic data to discover the nature of the deposits or environment of deposition for that time").

The second use of the word "seismic" is on page 4, column 3 merely states that users would have the option of "selecting present day, geological data such as well locations, and seismic lines, having the data electronically attached to tectonic plates and

rotated to age-related coordinates." In other words, the user could see where the location of a present day seismic line would have been in the distant geologic past in one of the time-slices. There is no display of or suggestion of a display of a seismic data file, compressed or otherwise.

Applicant notes and acknowledges the Official Notice of techniques for compression of data files. However, it is not clear what the relevance of the Examiner's assertion that "one of the ordinary skill would have been motivated to used compression techniques for the data to ensure the use of less storage and thereby reduce the mount of storage" is to the claims of the present invention. It is quite clear from the teachings and claims of the present invention that both compressed and full data files are linked and stored, so that producing and storing a compressed version only adds to the storage requirements, not reduce it.

There is absolutely no teaching or suggestion in *Foley* of a plurality of compressed seismic data files wherein each of the compressed seismic data files produces a corresponding geophysical display upon selection of a corresponding one of said surface seismic data lines. There is no reference to full seismic data files corresponding to compressed seismic data files wherein the compressed seismic data file has less information content.

The Examiner further asserts that "*Nomura* teaches a method and apparatus of providing a reference in each of said compressed seismic data files for linking to respective full seismic data files; and storing said compressed seismic data files." A word search of *Nomura* shows no use of the word "seismic" anywhere in the specifications or the claims. The entire subject matter of *Nomura* deals with display of maps on different scales.

In order to sustain a rejection under 35 USC §103, two requirements must be met. The first is a threshold requirement that the references when combined must disclose all the elements of the claimed invention. Secondly, there must be a suggestion on the references to make the combination and come up with the claimed invention.

As noted above, the first requirement is not met as none of the references of record teaches at least one element of independent claims 1 and 13. Accordingly, applicant submits that claims 1, claims 2-6 that depend upon claim 1, claim 13 and claims 14-20 that depend upon claim 13 are patentable under 35 USC § 103 over *Conoco* in view of *Nomura* and further in view of Official Notice.

Claims 2, 3, 18 and 19 stand rejected under 35 USC §103(a) as being unpatentable over the combination of *Conoco* and *Nomura* and further in view of *ESRI*. A review of *ESRI* shows no mention or teaching of the elements of claims 1 and 13 discussed above, i.e., full and compressed seismic data files. Hence claims 2, 3, 18 and

19 are patentable under USC §103(a) over the combination of *Conoco* and *Nomura* and further in view of *ESRI*.

No fee is believed to be due for the response. Please note the accompanying documents relating to a new power of attorney and a new correspondence address. The Commissioner is authorized to charge any deficiency and credit any surplus for the amendments herein to Deposit Account No. 13-0010 (CON-1029).

Respectfully submitted,



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